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How the Public Health Nurse Can Help to Control Cancer

By

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PURPOSE

The American Society for the Control of Cancer was founded in May of 1913 "to disseminate knowledge concerning the symptoms, diagnosis, treatment and prevention of cancer, to investigate the conditions under which cancer is found and to compile statistics in regard thereto".

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How the Public Health Nurse Can Help to Control Cancer*

CURTIS E. LAKEMAN

More and more the special organizations fighting particular diseases, as well as the public health authorities charged with the prevention of disease in general, are turning to the nurse and above all to the public health nurse as an indispensable assistant in nearly all their lines of endeavor. The campaign for the control of cancer marks no exception to this rule, since with this disease in some respects more than others the nurse has an unusual opportunity for effective service. Cancer is a disease which people do not like to talk about. It used to be the same with tuberculosis, and those directing the modern campaign of social hygiene meet with a similar difficulty. The enemy's first line trench is constructed of ignorance and mystery and unwillingness to face the fact. This barrier must be overcome before the forces of public health can advance. In the case of cancer this attitude is largely based on the deeply ingrained notion that the disease in each and every one of its many forms is hopelessly incurable and that a diagnosis of cancer is equivalent to a sentence of death. This is radically untrue and the first step toward reducing the excessive and preventable mortality from this disease is to spread the positive hopeful message that cancer, like tuberculosis, is curable if promptly recognized and treated in its early stages. This being the case, the special opportunity of the nurse arises from the fact that many patients, particularly women, will discuss with nurses signs and symptoms that are beginning to cause worry long before they will make up their minds to go to a doctor. This natural advantage of the nurse is increased by the fact that she becomes tem-

* An article by the same writer on "Efforts for the Improvement of Cancer Registration" appeared in the American Journal of Public Health, August, 1916, issue.

porarily a member of the family or makes frequent visits in the course of public health nursing duties and thereby soon becomes the confidential advisor regarding many matters of sickness and health.

To exercise to the full these opportunities for humane service the nurse must herself know the danger signals of cancer in its most important forms. In order that she many obtain a wider conception of her duties and opportunities and be inspired to do her part she should also have a general knowledge of the campaign against this disease and the possibilities of checking the increasing death rate by the education of the public. To this end the American Society for the Control of Cancer is endeavoring to have schools of nursing provide adequate instruction regarding the early signs of the disease and is taking advantage of every opportunity to have the topic discussed at the national and state conventions of nurses. The American Nurses Association, the National Organization for Public Health Nursing and the League of Nursing Education have each adopted formal resolutions in support of the cancer campaign and speakers representing the Society have appeared before them and before a number of the state and local organizations. A series of articles on the various forms of the disease is being published in the *American Journal of Nursing* and the *Public Health Nurse Quarterly*. The object of the present paper is to offer a brief account of this campaign and to urge all public health nurses to do their part.

Cancer at First a Local Disease

The plan upon which the present efforts for the control of cancer are based is fundamentally simple in its conception and its essence is contained in the apt old adage "a stitch in time saves nine." Practically without exception cancer is at first a local disease beginning in a microscopically small portion of the body. That means that theoretically it would always be easily curable if the small spot could be recognized and removed in time. The

first practical difficulty is to recognize it soon enough. Admittedly this is sometimes very hard if not impossible. The second practical difficulty and that which can more easily be overcome by education and practical effort is to get the patient to consult a physician about it soon enough after he or she recognizes that something is wrong. If all cases that came to treatment were early cases a great many more patients would be cured. We should then hear no more of the menace of cancer for the death rate would rapidly diminish instead of slowly but surely increasing as it is now doing.

Need of Educating the Public

The problem, then, is to get the case into the hands of a competent medical advisor while it is still in the early and curable stage, or even more fortunately, while the patient exhibits merely those conditions which are now widely recognized as predisposing factors in the causation of cancer. No matter how great his skill or how modern his knowledge the doctor cannot help a patient who does not come to him. The people must therefore be taught to recognize the disease when it first begins and to realize that early surgical removal, or the application of other modern remedies which are sometimes useful in competent hands, is the only hope of cure and that that hope is very great if the patient is wise enough to act promptly. It is easy for a certain type of mind to make the charge that propaganda of this kind represents only another scheme of the doctors to get patients. Fortunately it is also easy to answer that the doctors lose rather than gain since nearly every cancer patient gets into the doctor's hands sooner or later and in the early stages the operation is comparatively small and trifling while in the later stages it may be desperate and costly.

Causes of Delay

One reason that cancer patients today fail to seek the doctor's advice in time is probably that they do not real-

ize that cancer starts from such trifling beginnings or if they do have a suspicion that they may have cancer, people conceal it either from superstitious fear or false and fatal modesty. The old fashioned idea that cancer is a blood disease and is inherited still exerts a wide and baleful influence and must be overcome by spreading the modern knowledge that practically all forms of malignant growths are at first strictly localized, and that heredity has not been shown to play any important rôle in the development of cancer.

Another great obstacle in controlling this disease is the belief already referred to that it is a hopeless, incurable affliction. Unfortunately by the time the average individual has learned from personal experience what to do about cancer it is usually too late for him to profit by the knowledge. A child has to be burned to learn that fire is hot. He is apt to grow up and to have had the toothache many times before he learns that it is better to see a dentist occasionally even though not driven to him by pain. Unfortunately with cancer there is usually no pain to demand attention when it is still early enough to apply the remedy. By the time the symptoms are so marked as to alarm the uninformed and unfortunate victim it may be too late, for the invading cancer will probably have obtained a foothold from which it cannot easily be dislodged. If indeed the early symptoms of cancer caused half as much trouble as a toothache many more lives would be save because the patient would be driven to the doctor in time. This ignorance of symptoms which do not cause pain is a most serious obstacle to increasing the number of cures and the necessary knowledge in such cases is just what the educational campaign is endeavoring to impart. Unless prepared to recognize the signs that mark the beginning of cancer people are helplessly open to its ravages. A little knowledge in this case is not dangerous; it is essential. Without having to become an expert diagnostician every intelligent man and woman, and above all every trained nurse, may be expected to be

familiar with the elementary facts about the disease. The first symptoms of cancer are like lighthouses. To the unthinking observer these are merely strange lights in the dark distance with on special significance. To the navigator lighthouses are the beacons which mark dangerous reefs or rocks, reaching his intelligent attention with their message of how to steer to save the ship.

While then we must frankly admit that our scientific knowledge of the origin of cancer is still in many points imperfect, our practical power of arresting its onset and saving the patient in individual cases is already in many respects satisfactory. Some doctors believe that possibly three-quarters of the deaths from cancer and all the attendant suffering could be prevented if all members of the medical and nursing professions as well as the public, were adequately instructed in what they each ought to know about this disease. The nurse should therefore welcome every opportunity to add to her knowledge of the nature and danger signs of early cancer. Those in administrative positions in nursing schools should see to it that these facts are adequately presented to their pupils. Competent surgeons everywhere will be found willing to assist in these efforts since no one realizes more clearly than they what valuable service the nurse can render in this department of the public health movement.

The Essential Facts About Cancer

The facts are easily available. The publications of the American Society for the Control of Cancer will be sent to any nurse sending her name to the office, 25 West 45th Street, New York City. The American Medical Association, 535 North Dearborn Street, Chicago, has also published an excellent series of brief pamphlets on different forms of cancer. The following summary is therefore not intended to be in any sense a complete review of the subject but merely to include some of the essential facts which very nurse should know. These statements are based on the publications of the Cancer Society as

authorized by its National Council, which includes many of the foremost American physicians, surgeons and pathologists.

The Prevalence of Cancer

Cancer now causes at least 80,000 deaths every year in the United States. It is chiefly a disease of adult life, 83 per cent. of deaths from cancer occurring at ages of 45 and over. In this country cancer causes one death in every eight among women and one in every fourteen among men over 40 years of age.

It is a disease of special interest to women. Between the ages of 35 and 45 three times as many women as men die of cancer; between 45 and 55 twice as many. This excessive mortality among women is apparently due to cancer of the breast and the generative organs. These forms of the disease, like others, are usually curable by competent treatment in the early stages.

The recorded cancer death rate appears to be increasing in nearly every country. In the United States it has risen from 62.9 per 100,000 of population in 1900 to 78.9 in 1913. The increase, however, does not affect equally all types of the disease some of which appear to have reached a high point and to be now on the decline.

The Nature of Cancer

Cancer is a lawless growth of body cells which destroys life if allowed to run its course. Cancer cells escape the control of the laws of the body which govern the growth of normal cells and grow at a more rapid rate. The abnormal growth continues until a mass or tumor is formed and surrounding tissues are invaded. Eventually parts of the original growth may break off and be carried through the blood or lymph vessels to other organs and tissues of the body where they start secondary growths. It is the extension of the disease in this manner that leads to the common but erroneous belief that

cancer is a constitutional or blood disease. Cancer is on the contrary at first a purely local growth and in the early stages is usually removable and curable.

Predisposing Factors

While we do not know the ultimate cause which starts the lawless growth of cells, we know a great deal about the conditions under which this growth begins. Extremely significant in this respect are the various forms of chronic irritation and the abnormalities of tissue found in benign growths or continuing ulcerations. The most important fact developed by the newest knowledge of cancer is that there is no hard and fast distinction between benign and malignant growths, but the latter often arise from the former.

Cancer may therefore be prevented by preventing any form of chronic irritation. Persistent ulcerations, cracks and sores, and warts, moles or birth marks which change in appearance or grow larger should be removed. Intelligent attention to these "precancerous conditions" and periodic examination by a competent physician or surgeon will greatly reduce the danger of developing the disease itself.

Cancer of the Breast

This is one of the most hopeful and curable forms of cancer because early diagnosis is comparatively easy. Nevertheless the disease spreads rapidly from this locality and immediate treatment is imperative.

In general cancer is not painful during the curable stages and in the breast in particular any lump is vitally important whether painful or not. The only exceptions are the lumps suddenly appearing in the nursing breast which are usually temporary and unimportant. While many persistent lumps are not cancer any of them may turn into cancer. Those which appear after 30 years of age are especially important. All lumps in the breast

at any age should therefore be promptly seen by a competent surgeon since as a rule they demand prompt removal. By no means all women realize this and here is one of the chief opportunities of the nurse to give life saving advice. The nurse may also explain the comparatively trifling nature of the operation for the removal of small lumps and the fact that little or no disfigurement takes place if the lump proves benign. On the contrary delay means radical operation which though necessary may be dangerous and mutilating. It should be remembered that any lump which is allowed to persist until it is recognized as cancer will prove fatal if further neglected.

Cancer of the Uterus

This is a frequent disease. Formerly it was among the most hopeless forms of cancer but now conditions are better because early diagnosis and removal is possible and under modern methods relatively safe. Many thousands of patients could be saved if the surgeon were consulted earlier but unfortunately women have very erroneous ideas on this subject. One of the commonest errors is the belief that excessive flowing at the change of life is normal and to be expected. Again and again the doctor secures this history from patients too far advanced with cancer of the uterus to permit of successful operation. The nurse should warn women that excessive flowing at any period of life is abnormal and should be investigated. At the time of menopause it is very suspicious. It may be due to a benign tumor or to other non-cancerous conditions but it is absolutely essential to know exactly what the cause is. Pelvic pain and foul discharge are late symptoms and when they appear it is usually too late for radical cure although the patient may be benefited by proper treatment. Women past the change of life should be made to realize the necessity of seeking advice when there is a return of the flow. This is a very important sign of danger and should be investigated at

once. The nurse should therefore insist upon women consulting their physicians at once upon the first appearance of anything abnormal.

The first warning signs of this disease may best be summarized as (1) any change in the menstruation and (2) any change is a discharge which has been usual with the patient. Any spotting following injury to the cervix as with douche, examination, etc., is especially significant. Watery, slightly stained discharges are also particularly important. These are not necessarily signs of cancer but they are warnings which should lead to immediate consultation with a doctor and to immediate and thorough examination. The nurse should explain the necessity of such examination and point out that treatment without thus making certain of the cause of the trouble is wrong and by causing delay may still further endanger life.

Cancer of the Digestive Organs

Cancers of the stomach, intestines, and liver are frequent and formidable types of the disease which are common to both sexes and cause about 40 per cent. of all deaths from cancer. While the probability of cure is here considerably less than in the locations previously discussed, cancer of these organs can still be successfully removed if the diagnosis is made early enough. This statement does not apply to cancer of the liver since the disease cannot be removed from that organ, but fortunately primary cancer in this location is rare.

Cancer of the stomach and intestines is at best one of the most difficult forms of the disease with which to deal and the earliest possible attention to danger signals is doubly imperative. The onset is often so insidious that malignancy may be far advanced when the first warning comes. Since cancer of these organs cannot be seen until the abdomen is opened it is necessary at first to depend largely upon symptoms for a diagnosis. The X-ray, however, can often demonstrate suspicious changes in the outline of the stomach or intestine. Moreover, the normal

function of the organ attacked is usually interfered with early and this ought to arouse suspicion. Neither in these forms of the disease nor in any other should the nurse ever undertake the responsibility of making a diagnosis in a suspicious case. Her full duty is discharged when she warns patients with certain symptoms that they *may* have something serious the matter, and urges them to seek competent medical advice. Especially is this true of patients of 35 or 40 years of age and over whose symptoms point to the disturbance of digestive function. Indigestion is a very common complaint but in a person over 40 who has not had it before, especially if accompanied by loss of weight, it is something that should at least lead one to think of cancer. It is by no means a sure indication of cancer of the stomach but if it persists it is well to be on the safe side and have a thorough examination with the aid of all modern methods of diagnosis, particularly the X-ray. A change in appetite, such as a distaste for meat, is not infrequently a symptom of cancer of the stomach. Pain at the pit of the stomach and vomiting, often without visible blood, are still graver danger signals.

The first symptoms of cancer of the intestines are similar. Persisting diarrhoea, with bleeding, is a common warning sign. Cancer of the rectum is frequently mistaken for hemorrhoids and treated as such. Bleeding from the rectum is often due to this cause but it may be an early symptom of cancer and therefore in any event demands thorough examination. Only in this way can a differential diagnosis be made and here again treatment without examination is wrong.

External Cancer

There is less excuse for failure to suspect the possibility of cancer on the external surfaces of the body where the growth can be seen and inspected. Cancer of the lip or tongue, for instance, should be suspected when any sore on these parts does not heal and disappear. Can-

cer of the lip in its beginning ofter resembles the common cold sore but, of course, persists when a cold sore would rapidly clear up. The disease is more common among men than women and is supposed to be due to irritation such as that produced by smoking, neglected sores or cracks in the lips, etc.

Cancer of the tongue has been frequently traced to constant irritation from badly fitting or broken dental plates, sharp edges of decayed teeth, etc. Smoking as a form of chemical irritation produces a chronic inflammation of the tongue and the formation of small fissures or ulcers. Any ulceration of the tongue that does not quickly respond to treatment should be considered malignant until it is proved otherwise. Cancer of the tongue spreads rapidly necessitating a severe and dangerous operation and only if the case is seen early and promptly treated is there even a fair chance for a permanent cure. Nitrate of silver or other caustics must not be applied to irritative ulcers of the tongue. This treatment in the case of unrecognized cancer will stimulate the malignant growth.

Cancer of the skin frequently originates in benign lumps or ulcerations. Most warts and moles are unimportant but those which change in size, shape, or appearance or are subject to irritation should be regarded with suspicion. Their removal may prevent cancer. Persistent irritation, ulcerations, or lumps anywhere in the skin should be watched. If there is an increase in the rate of growth or if ulcerations appear, such conditions should be removed at once. Competent treatment of these so called precancerous lesions and of actual early cancer of the skin means as a rule a minor operation or the use of X-ray or radium. The use of caustics in competent hands is sometimes successful but as a rule other methods are safer and produce less deformity.

Hereditary and Contagion

Cancer has not been proven to be hereditary. Recent demonstrations of the inheritance of a liability to cancer

in certain strains of mice must be confirmed and extended to other species of animals before the conclusions can be applied to human beings. Even those holding the strongest views on this topic only maintain that a tendency to cancer is inherited and not the disease itself. The large number of cases occurring in some families can readily be explained by chance since cancer is a very frequent disease, especially among older people. In the light of present knowledge the public should not worry about the possibility of inheriting cancer.

Cancer is not contagious or infectious. Allegations to the contrary based on supposed "cancer houses," "villages" and "streets" do not bear the light of critical examination. Nearly all such aggregations of cases have been shown to be due to special conditions, such as an unusual preponderance of old people among whom the cancer death rate would naturally be high.

The possibility of transferring cancer from one person to another by direct contact should be practically disregarded. In all the thousands of recorded operations for cancer there is no report of a case acquired from the patient by any surgeon or nurse. Cruel neglect of some patients has been known to occur because of groundless fear of "catching" the disease. This is doubly unfortunate since cancer in the incurable stages demands the extreme of patience and humane care of the sufferer.

Ordinary care and cleanliness should, of course, be observed in attending cancer patients as in cases of any kind of illness, but isolation and fumigation as in the case of contagious diseases is not called for. Soiled dressings should be carefully collected and disinfected or burned, not because there is any danger of contagion of cancer but because the discharges and dressings contain germs, such as those which cause boils, erysipelas and other skin inflammations.

Cancer Cures and Quacks

The nurse should lose no opportunity to warn against the misleading and dangerous quack remedies and treat-

ments offered for the cure of cancer. There is no more despicable aspect of human nature than that which would take advantage of the desperate fears and hopes of sufferers from this disease. All "cancer cures" and advertisements are swindles. Such "cures" are generally speaking of two classes: (1) drugs for internal use in connection with certain anticeptic washes, and (2) pastes or poultices containing strong chemical caustics. There is no medicine that will cure cancer and while drugs offered for this purpose may be harmless they are valueless and may cause the loss of vitally important time while the cancer develops beyond the operative stage. Except when used by competent physicians in certain minor and relatively unimportant forms of the disease, pastes are worse than useless. They may actually stimulate the cancer and make it grow more rapidly or they may eat off the top and leave the bottom spreading in deeper, all the while causing a loss of precious time.

If confronted with testimonials of cures by quacks and advertising "specialists" and "institutes" the nurse should explain how easily testimonials are manufactured and secured in wholesale lots, and that with regard to cancer in particular they are usually based on the removal of conditions which were not cancer at all. Not only are there many forms of cancer itself, but there are numerous conditions not actually cancer which closely approach the disease in appearance and can be used by unscrupulous fakers in preying upon the fears and pocketbooks of unfortunate and uninformed patients.

Radium and X-Rays

The nurse may be asked about these new methods of treatment. She should explain that they are definitely useful in certain types of superficial cancer, such as those which appear on the skin in old people and that in some cases they may help to complete a surgical cure by healing any small lump which appears after the operation. They are also a recognized and valuable palliative treat-

ment of cancer which has gone so far that it cannot be operated upon. In general the value of radium is not yet finally determined though the outlook for its usefulness is hopeful. It should be remembered that there is even yet very little radium in the country and the amounts sufficient to be of value are in the hands of a comparatively small number of institutions. Great care should therefore be taken in selecting a physician to give these forms of treatment, since only a few doctors have enough radium to do any good and only a few know how to administer, without burning the patient seriously, the large quantities of X-rays which are necessary to produce good effects.

Summary

In conclusion, the following points should be especially remembered and impressed upon all patients who seek advice:

1. Cancer is not a "blood disease" but always starts as a local growth. Hence it can always be cured by removal if discovered and treated early enough.

2. Cancer in the beginning may cause no pain or other noticeable symptoms of ill health.

3. Cancer is probably not hereditary.

4. Cancer is not contagious.

5. No really competent doctor will treat a condition that might mean cancer without *thorough examination.*

6. The cancer patient must learn to seek treatment as promptly as the patient with appendicitis.

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